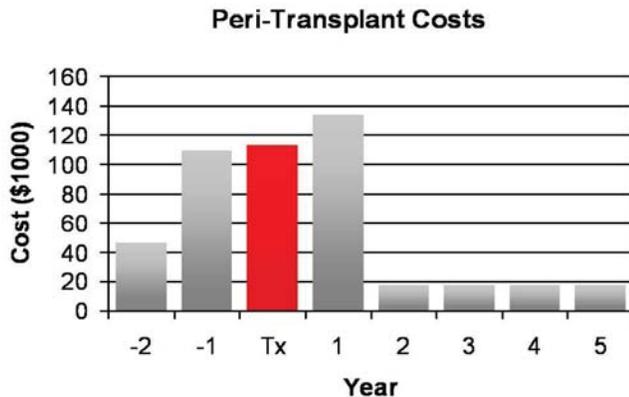


Improve donor heart viability *and* decrease peri-operative costs with Asporto

Because heart transplantation patients are generally much healthier than other patients with end-stage heart failure, there is a significant decrease in medical costs one year after transplantation. This is then followed by relatively a constant annual expenditure from immunosuppression medications.



A cost analysis completed by Dr. Schnitzler at the St. Louis University School of Medicine determined that the additional value and quality of life year obtained with a heart transplant is worthy of an additional \$500,000 invested per donor heart because the cost avoided by each additional patient removed from the waiting list is approximately \$440,000.¹ He concluded that combining the social worth and the quality of life year obtained from heart transplantation for heart failure results in a better cost effectiveness than left ventricular assist device destination therapy or even medical management. This is because costs escalate at the end-of-life from intensive medical care (about \$10,000/day). In the absence of another viable alternative, cardiac transplantation will never consume enormous resources as compared to other approaches to treating patients with end-stage diseases.²

Another problem with heart transplantation is rejection of the donor heart. Rejection depends upon tissue compatibility of the donor heart, ranked from 0 to 6 based upon tissue (mis)matching. If the tissue mismatches are 0 or 1 then the risk of rejection in the first year is 44%, this goes up to 65% when there are 5 or 6 mismatches.³ Based upon a current cost to treat rejection at \$5,750, the total annual cost for poorly matched hearts is about \$2.5 million.⁴

One of Hibernicor's future objectives is to provide the necessary additional time to allow laboratory completion of tissue matching. This will provide patient's with a better-matched heart, thus improving patient survival and reducing the cost of post transplant care from reduced rejection episodes.

References:

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